

§CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

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ORDER NO. R2-2006-XXXX

NPDES NO. CA0037737

WASTE DISCHARGE REQUIREMENTS
FOR THE NORTH SAN MATEO COUNTY SANITATION DISTRICT
DISCHARGE TO THE PACIFIC OCEAN VIA DISCHARGE POINT 001

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	North San Mateo County Sanitation District
Name of Facility	North San Mateo County Sanitation District WWTP and Sewage Collection System
Facility Address	153 Lake Merced Boulevard
	Daly City, California 94015
	San Mateo County

The discharge by the North San Mateo County Sanitation District from the discharge point identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	secondary and tertiary treated effluent	37°, 42', 54" N	122°, 30', 46" W	Pacific Ocean

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	<Adoption Date>
This Order shall become effective on:	<Effective Date>
This Order shall expire on:	<Expiration Date>
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, <u>not later than 180 days in advance of the Order expiration date</u> as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that this Order supersedes Order No. 00-017 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Bruce Wolfe, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on **<Adoption Date>**.

Bruce Wolfe, Executive Officer

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I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	North San Mateo County Sanitation District
Name of Facility	North San Mateo County Sanitation District WWTP and Sewage Collection System
Facility Address	153 Lake Merced Boulevard
	Daly City, CA 94015
	San Mateo County
Facility Contact, Title, and Phone	Patrick Sweetland, Director, (650) 991-8200
Mailing Address	333 90 th Street, Daly City, CA 94015
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	8 MGD (dry weather treatment capacity)
	25 MGD (wet weather treatment capacity)

II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Regional Water Board), finds:

- A. **Background.** North San Mateo County Sanitation District (hereinafter Discharger) is currently discharging pursuant to Order No. 00-017 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037737. The Discharger submitted a Report of Waste Discharge, dated September 15, 2004, and applied for a NPDES permit renewal to discharge up to 8 MGD (dry season) and 25 MGD (wet season) of treated wastewater from North San Mateo County Sanitation District Wastewater Treatment Plant, hereinafter Facility.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B. **Facility Description.** The Discharger owns and operates a sanitary sewage treatment plant and the sewage collection system serving City of Daly City, portions of San Mateo County, the Town of Colma, San Francisco County Jail, and the Westborough Water District within the City of South San Francisco. The treatment system, which consists of screening, compacting, primary sedimentation and secondary clarification, degritting, gravity and air floatation thickening, anaerobic digestion, dewatering and a tertiary treatment system for recycled water, provides secondary treatment of domestic wastewater from the service area. A portion of the effluent receives tertiary treatment for water reclamation projects on a seasonal basis. The combined service population is approximately 120,000. Approximately 180 miles of sanitary sewer lines and eight lift stations convey domestic sewage to the facility. Treated wastewater is discharged through the Vista Grande Tunnel structure and a 27” force main located on Ocean Beach in San Francisco County. Final discharge is through a submerged diffuser extending 2,500 feet from the shoreline and terminating at a depth of approximately 32 feet (-32 MLLW) (Discharge Point 001, see table on cover page) to the Pacific Ocean, a water of the United States. Attachment B

provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).
- D. **Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.
- E. **California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the CEQA, Public Resources Code sections 21100-21177.
- F. **Technology-based Effluent Limitations.** Title 40 of the Code of Federal Regulations, at section 122.44(a)¹ requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Secondary Treatment Standards at Part 133. The Regional Water Board has considered the factors listed in Water Code section 13241 in establishing these requirements. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. **Water Quality-based Effluent Limitations.** Section 122.44(d) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).
- H. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the San Francisco Bay Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean and other receiving waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water

¹ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the coast areas in the San Francisco Bay Region are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Water contact recreation, non-contact water recreation; industrial service supply; navigation; marine habitat; shellfish harvesting; ocean, commercial and sport fishing; and preservation of rare and endangered species.

Requirements of this Order implement the Basin Plan.

The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal waters. Requirements of this Order implement the Thermal Plan.

- I. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table 6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting

In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

- J. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21; 65 Fed. Reg. 24641; (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

- K. Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on carbonaceous biochemical oxygen demand, total suspended solids, settleable solids, oil and grease, turbidity, pH, total chlorine residual and total coliform bacteria. Restrictions on these pollutants are specified in federal regulations as discussed in the Fact Sheet (Attachment F), and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual WQBELs are based on the Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.
- L. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- M. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.
- N. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- O. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Regional Water

Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

- P. **Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, V.B, and VI.C. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- Q. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- R. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

III. DISCHARGE PROHIBITIONS

- A. Discharge of wastewater at locations or in a manner different from that described in section II.B of this Order is prohibited.
- B. Discharge rates (MGD) shall not exceed the design capacities of the treatment facility—8 MGD (average dry weather capacity determined over three consecutive dry weather months each year) and 25 MGD (peak wet weather capacity).
- C. The discharge of municipal or industrial waste sludge either directly or indirectly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digestion supernatant directly to the ocean, or into a waste stream that discharges to the ocean without further treatment, is prohibited.
- D. Discharges shall be essentially free of material that is floatable or will become floatable upon discharge.
- E. Discharge shall be essentially free of settleable material or substances that may form sediments that will degrade benthic communities or other aquatic life.
- F. Discharge shall be essentially free of substances that will accumulate to toxic levels in marine waters, sediments or biota.
- G. Discharge shall be essentially free of substances that significantly decrease the natural light to benthic communities and other marine life.
- H. Discharge shall be essentially free of materials that result in aesthetically undesirable discoloration of the ocean surface.

- I. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.
- J. Waste shall not be discharged to designated Areas of Special Biological Significance except as provided in Chapter III.E of the Ocean Plan.
- K. The bypass of untreated waste containing concentrations of pollutants in excess of those listed in Table A or Table B of the Ocean Plan is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001 with compliance measured at Monitoring Location E-001 as described in the attached MRP:

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations ^[1]					
		Average Monthly	Average Weekly	Average Daily	6-month Median	Maximum Daily	Instantaneous Maximum
Carbonaceous Biochemical Oxygen Demand 5-day @ 20°C	mg/L	25	40	50	--	--	--
	--	--	--	--	--	--	--
Total Suspended Solids	mg/L	30	45	60	--	--	--
	--	--	--	--	--	--	--
Oil and Grease	mg/L	25	40	--	--	--	75
	--	--	--	--	--	--	--
Settleable Solids	ml/L	1.0	1.5	--	--	--	3.0
Total Chlorine Residual ^[2]	mg/L	--	--	--	0.14	0.57	4.3
	kg/day	--	--	--	4.2	17	--
Turbidity	NTU	75	100	--	--	--	225
Chronic Toxicity ^[3]	TU _c	--	--	--	--	71	--

Parameter	Units	Effluent Limitations ^[1]					
		Average Monthly	Average Weekly	Average Daily	6-month Median	Maximum Daily	Instantaneous Maximum

[1] Mass emission limitations are based on a peak dry weather capacity of 8 mgd. Weekly and monthly mass effluent limitations shall be calculated by averaging the reported daily values over the relevant number of days for the monitoring interval.

[2] The Total Chlorine Residual effluent limit is suspended for the duration of the Beneficial Uses Survey/Dilution Study Period described in Section VI.C.5 (Other Special Provisions).

[3] Expressed as Chronic Toxicity Units (TU_c)

TU_c = 100/NOEC where:

NOEC (No Observed Effect Concentration) is expressed as the maximum percent effluent or receiving water that causes no observable effect on the test organism as determined by the result of a critical life state toxicity test listed in Appendix III of the Ocean Plan (2005) adopted and effective February 14, 2006.

- b. **85 Percent Removal, CBOD₅ and TSS:** The arithmetic mean of the CBOD₅ and TSS values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.
- c. **pH:** The pH of the discharge shall not exceed 9.0 nor be less than 6.0.
- d. **Total Coliform Bacteria:** The treated wastewater, prior to discharge, shall not exceed a geometric mean value of 2,400 MPN/100 ml for any five consecutive samples. No single sample may exceed 24,000 MPN/100 ml.
- e. **Interim Total Coliform Bacteria Limit:** Effluent Limitation A.1.d (Total Coliform Bacteria) shall be suspended during the Beneficial Uses survey/dilution study period defined in Section VI.C.5 (Other Special Provisions). During the study period, the discharger shall comply with total and fecal coliform requirements specified in Receiving Water Limitations V.A.1 and V.A.3. These interim limits shall expire no later than April 30, 2009.

B. Land Discharge Specifications

Not applicable.

C. Reclamation Specifications

The Discharger shall comply with all applicable requirements for recycled water, as specified in Title 22 of the California Code of Regulations Division 4, Chapter 3, and as specified in General Water Reuse Order 92-011.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Ocean Plan and are a required part of this Order. Compliance shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Water Board, the following bacteriological objectives shall be maintained throughout the water column:
 - a. Samples of water from each sampling station shall have a concentration of total coliform organisms less than 1,000 per 100 ml (1,000 MPN) provided that not more than 20 percent of samples at any sampling station, in a 30-day period, exceeds 1,000 MPN, and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 MPN.
 - b. The fecal coliform concentration based on a minimum of not less than 5 samples for any 30-day period shall not exceed a geometric mean of 200 MPN nor shall more than 10 percent of the total samples during any 60-day period exceed 400 MPN.
2. The "Initial Dilution Zone" of wastewater outfalls shall be excluded from designation as "kelp beds" for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.
3. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the following bacteriological objectives shall be maintained throughout the water column:
 - a. The median total coliform concentration shall not exceed 70 MPN, and not more than 10 percent of samples shall exceed 230 MPN.
4. Floating particulates and grease and oil shall not be visible.
5. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
6. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
7. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
8. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally as a result of the discharge of oxygen demanding waste material.
9. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

10. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
11. The concentration of substances set forth in Chapter IV, Table B of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.
12. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
13. Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
14. Ocean Plan Table B water quality objectives apply to all discharges within the jurisdiction of the Ocean Plan.
15. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.
16. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
17. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
18. Discharge of low-level radioactive waste shall not degrade marine life.

B. Groundwater Limitations

Not applicable.

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Regional Water Board Standard Provisions.** The Discharger shall comply with all applicable items of the *Standard Provisions and Reporting Requirements, August 1993* (Attachment G), including any amendments thereto. Where provisions or reporting requirements specified in this Order are different from equivalent or related provisions or reporting requirements given in the Standard Provisions, the specifications of this Order shall apply.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. The MRP includes monitoring for conventional, non-conventional, and toxic pollutants in

influent, effluent, and receiving water, as well as requirements to record observations made on the site of the POTW and within the collection system.

C. Special Provisions

1. **Reopener Provisions.** The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances:
 - a. If present or future investigations demonstrate that the discharge governed by this Order will, or cease to, have adverse impacts on water quality and/or beneficial uses of the receiving waters.
 - b. As new or revised WQOs come into effect for surface waters of the State (whether statewide, regional, or site-specific.) In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs.
 - c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified.
 - d. An administrative or judicial decision on a separate NPDES permit or WDR that addresses requirements similar to this discharge; and
 - e. As authorized by law.

The Discharger may request permit modification based on b, c, d, and e above. The Discharger shall include in any such request an antidegradation and antibacksliding analysis.

2. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

The Discharger shall develop and conduct a PMP as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a pollutant identified in Table B of the current California Ocean Plan is present in the effluent above an effluent limitation that is calculated for a constituent contained in Table B of the California Ocean Plan and either:

- (1) The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML; or
- (2) The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- (1) An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling; or alternative measures approved by the Executive Officer when it is demonstrated that source monitoring is unlikely to produce useful analytical data;
- (2) Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system; or alternative measures approved by the Executive Officer, when it is demonstrated that influent monitoring is unlikely to produce useful analytical data;
- (3) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant(s) in the effluent at or below the effluent limitation;
- (4) Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy; and
- (5) An annual status report that shall be sent to the Regional Water Board including:
 - i. All PMP monitoring results for the previous year;
 - ii. A list of potential sources of the reportable pollutant(s);
 - iii. A summary of all actions undertaken pursuant to the control strategy; and
 - iv. A description of actions to be taken in the following year.

3. Construction, Operation and Maintenance Specifications

a. Wastewater Facilities, Review and Evaluation, and Status Reports

- 1) The Discharger shall operate and maintain its wastewater collection, treatment, and disposal facilities in a manner to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.
- 2) The Discharger shall regularly review and evaluate its wastewater facilities and operation practices in accordance with section a.1 above. Reviews and evaluations shall be conducted as an ongoing component of the Discharger's administration of its wastewater facilities.
- 3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its wastewater facilities and operation practices, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures, and applicable wastewater facility programs or capital improvement projects.

b. Operations and Maintenance Manual (O&M), Review and Status Reports

- (1) The Discharger shall maintain an O&M Manual as described in the findings of this Order for the Discharger's wastewater facilities. The O&M Manual shall be maintained in usable condition and be available for reference and use by all applicable personnel.
- (2) The Discharger shall regularly review, revise, or update, as necessary, the O&M Manual(s) so that the document(s) may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and revisions or updates shall be completed as necessary. For any significant changes in treatment facility equipment or operation practices, applicable revisions shall be completed within 90 days of completion of such changes.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its O&M manual, including any recommended or planned actions and an estimated time schedule for these actions. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures and applicable changes to its operations and maintenance manual.

c. Contingency Plan, Review and Status Reports

- (1) The Discharger shall maintain a Contingency Plan as required by Regional Water Board Resolution 74-10 (Attachment G) and as prudent in accordance with current municipal facility emergency planning. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or adequately implement a Contingency Plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
- (2) The Discharger shall regularly review and update, as necessary, the Contingency Plan so that the plan may remain useful and relevant to current equipment and operation practices. Reviews shall be conducted annually, and updates shall be completed as necessary.
- (3) The Discharger shall provide the Executive Officer, upon request, a report describing the current status of its Contingency Plan review and update. The Discharger shall also include, in each annual self-monitoring report, a description or summary of review and evaluation procedures and applicable changes to its Contingency Plan

4. Special Provisions for Municipal Facilities (POTWs Only)

a. Sludge Practices

- (1) For sludge management, the Discharger shall comply with all requirements of 40 CFR Part 503.

- (2) The Discharger shall not allow sludge material to be deposited in or leach to waters of the State. Sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.
- (3) Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR Part 258. In the annual self-monitoring report, the Discharger shall include the amount of sludge disposed of, and the landfill to which it was sent.
- (4) This Order does not authorize permanent on-site storage or disposal of sludge. A Report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activities.
- (5) The Discharger shall submit an annual report to the USEPA and the Regional Water Board containing reuse information and other information pertaining to sludge, as required at 40 CFR Part 503.

b. Sanitary Sewer Overflows and Sewer System Management Plan

The Discharger's collection system is part of the facility that is subject to this Order. As such, the Discharge must properly operate and maintain its collection system (Attachment D, Standard Provisions - Permit Compliance, subsection I.D). The Discharger must report any noncompliance (Attachment D, Standard Provision - Reporting, subsections V.E.1 and V.E.2), and mitigate any discharge from the Discharger's collection system in violation of this Order (Attachment D, Standard Provisions - Permit Compliance, subsection I.C). The General Waste Discharge Requirements for Collection System Agencies (Order No. 2006-0003 DWQ) has requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Compliance with these requirements will also satisfy the federal NPDES requirements specified in this Order. Furthermore, the Discharger shall comply with the schedule for development of sewer system management plans (SSMPs) as indicated in the letter issued by the Regional Water Board on July 7, 2005, pursuant to Water Code Section 13267. Until the statewide on-line reporting system becomes operational, the Discharger shall report sanitary sewer overflows electronically according to the Regional Water Board's SSO reporting program.

5. Other Special Provisions

- a. Beneficial Uses Survey/Dilution Study: The Discharger shall conduct a Beneficial Uses Survey/Dilution Study in accordance with the schedule below unless modified with the approval of the Executive Officer, and in accordance to Chapter II.B of the Ocean Plan.

Submit Draft Survey/Monitoring Proposal By:	February 28, 2007
Revise Draft per Executive Officer's comments and submit Final Survey/Monitoring Plan By:	April 30, 2007
Submit Final Report	October 31, 2008

The purpose of the Beneficial Uses Survey/Dilution Study is to identify where the beneficial uses established by the Ocean Plan exist or could exist that could be affected

by the discharge; and to determine appropriate bacteriological effluent limits based on Ocean Plan receiving water objectives and dilution or attenuation between the discharge and existing or potential beneficial uses. Bacteriological limits proposed in the Final Report should be compared to the existing total coliform effluent limit in this Order.

Note that the Water Board may consider amending this Order to adopt new limits based on the results of the Study.

6. Compliance Schedules

a. Heptachlor

- (1) *Heptachlor WQO*. The WQO for heptachlor established by the Ocean Plan is 0.00005 ug/L.
- (2) *RPA Results*. The MEC for heptachlor of 0.033 µg/L exceeds the applicable WQO after dilution, demonstrating reasonable potential.
- (3) *WQBELs*. The WQBEL for heptachlor calculated according to Ocean Plan procedures is a monthly average of 0.0036 µg/L. The Discharger's 70:1 dilution credit was incorporated in the calculation of the WQBEL.
- (4) *Immediate Compliance Infeasible*. The Discharger's Justification for a Compliance Schedule asserts that the Discharger cannot immediately comply with the WQBEL calculated for heptachlor. The data are insufficient for statistical analysis, and the MEC exceeds the WQBEL. The Regional Water Board therefore concurs with the infeasibility claim.
- (5) *Interim Effluent Limitation*. The data are insufficient to allow the calculation of an interim effluent limitation. In addition, it is not clear that the Discharger could meet an interim effluent limitation set equal to the MEC of 0.033 ug/L. During the period January 2000 to December 2005, the laboratory MLs ranged from 0.0056 ug/L to 0.08 ug/L, a level well above the MEC. Therefore, no interim effluent limit is established by this Order.
- (6) *Special Monitoring*. For the first year, heptachlor monitoring at point E-001 shall be conducted quarterly. If heptachlor is not detected in excess of the calculated WQBEL of 0.0036 ug/L, the monitoring frequency shall be reduced to annually. If heptachlor is detected in excess of the calculated WQBEL prior to the expiration of this Order, the Discharger will increase effluent monitoring frequency to quarterly; commence quarterly monitoring of the influent and sludge; submit a plan for a source identification study no later than 6 months after the detection of heptachlor; perform the source identification study; and, based on the source identification study and the influent, effluent and sludge monitoring results, propose and implement a source control plan no later than 12 months after the detection of heptachlor.

(7) *Antibacksliding/Antidegradation*. Antibacksliding/antidegradation requirements are satisfied as the previous Order did not include an effluent limitation for heptachlor.

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. General

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

B. Multiple Sample Data

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Daily Effluent Limitation (ADEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of intermittent discharges over a single 24-hour day exceeds the ADEL for a given parameter, this will represent a single violation. If only a single sample is taken during the 24-hour day and the analytical result for that sample exceeds the ADEL, the Discharger will be considered out of compliance for that day. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one day during which no sample (daily discharge) is taken, no compliance determination can be made for that day.

D. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given

parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

E. Average Weekly Effluent Limitation (AWEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

F. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge (or when applicable, determined by subsection B above for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

G. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

H. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

I. Six-month Median Effluent Limitation.

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, the Discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the Discharger will be considered out of compliance for the 180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median limitation.

ATTACHMENT A – DEFINITIONS

Acute Toxicity:

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where:

S = percentage survival in 100% waste. If $S > 99$, TUa shall be reported as zero.

Areas of Special Biological Significance (ASBS): are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity: This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix III.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

DDT shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Degrade: Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ) are those sample results less than the reported Minimum Level, but greater than or equal to the laboratory's MDL.

Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Downstream Ocean Waters shall mean waters downstream with respect to ocean currents.

Dredged Material: Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

Enclosed Bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between

headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estuaries and Coastal Lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Initial Dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Water Board, whichever results in the lower estimate for initial dilution.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Kelp Beds, for purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

Mariculture is the culture of plants and animals in marine waters independent of any pollution source.

Material: (a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

Maximum Daily Effluent Limitation (MDEL): the highest allowable daily discharge of a pollutant.

MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, PART 136, Appendix B.

Minimum Level (ML) is the concentrations at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.

Natural Light: Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Ocean Waters are the territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table B pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when

establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Reported Minimum Level is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

Satellite Collection System is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Shellfish are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs) are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

TCDD Equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

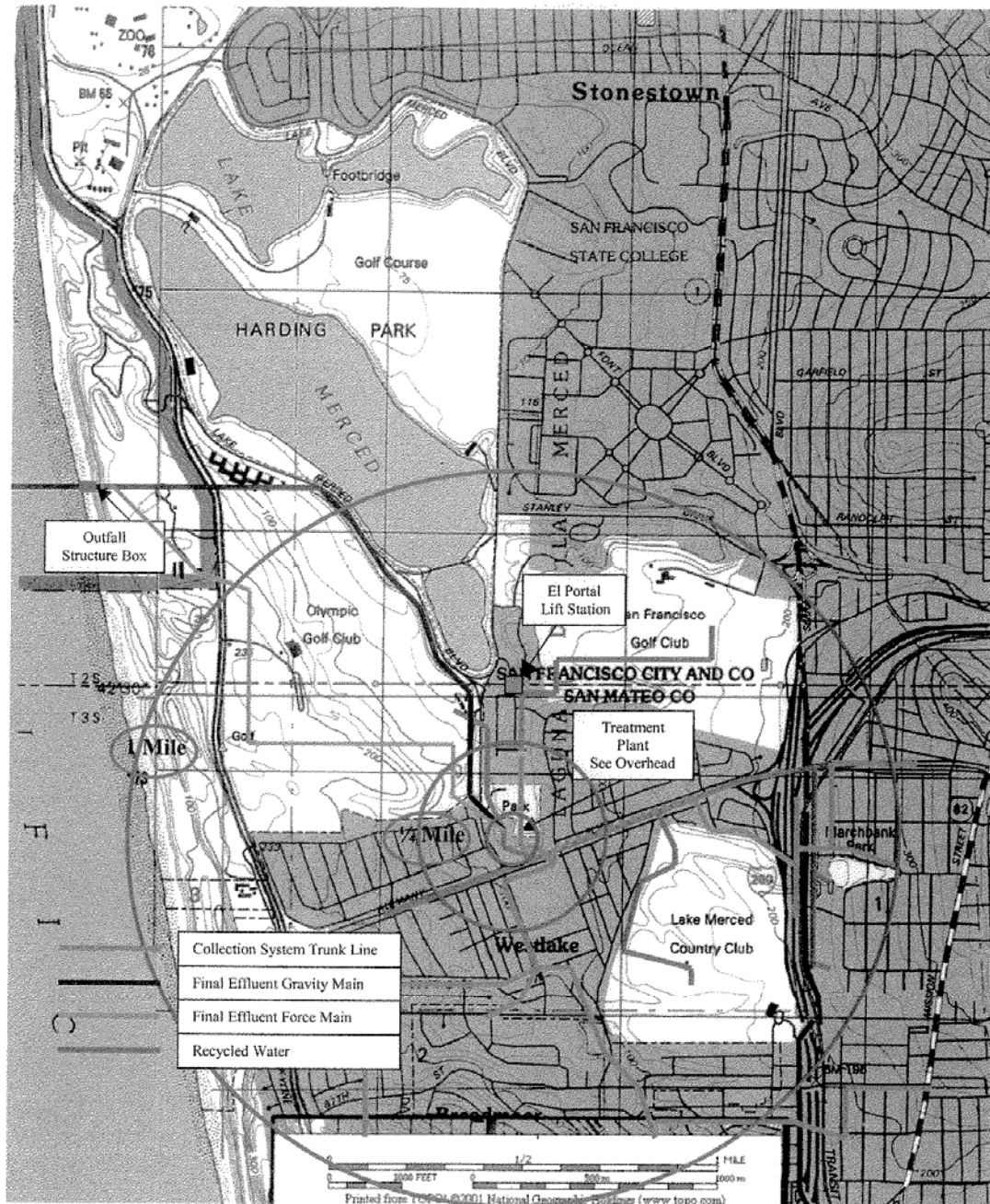
Isomer Group	Toxicity Equivalence Factor
	1.0
2,3,7,8-tetra CDD	
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Waste: As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

Water Reclamation: The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

ATTACHMENT B – MAP



NSMCSD Treatment Plant – Topographic Map

Attachment A

ATTACHMENT D –STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions
 - a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
 - b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
5. Notice
- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
- 2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

- b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring

information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal

agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).)

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1). (40 C.F.R. § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of this Order. (40 C.F.R. § 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A. The Discharger shall comply with the MRP for this Order as adopted by the Regional Water Board, and with all of the Self-Monitoring Program, Part A, adopted August 1993 (SMP). The MRP and SMP may be amended by the Executive Officer pursuant to USEPA regulations 40 CFR Parts 122.62, 122.63, and 124.5. If any discrepancies exist between the MRP and SMP, the MRP prevails.
- B. Sampling is required during the entire year when discharging. All analyses shall be conducted using current USEPA methods, or methods that have been approved by the USEPA Regional Administrator pursuant to 40 CFR Part 136.4 and 40 CFR Part 136.5, or equivalent methods that are commercially and reasonably available, and that provide quantification of sampling parameters and constituents sufficient to evaluate compliance with applicable effluent limits. The Regional Water Board will find the Discharger in violation of the limitation if the discharge concentration exceeds the effluent limitation and the Reported Minimum Level for the analysis for that constituent.
- C. Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table 1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)	
Influent	A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment, and exclusive of any return flows or process side streams.	
Effluent	E-001	At any point in the treatment facilities between the point of discharge and the point at which all waste tributary to the outfall is present (may be the same as E-001D)	
	E-001D ^[1]	At any point in the treatment facilities at which point adequate contact with the disinfectant is assured.	
Receiving Waters ^[2]	Fixed Sampling Locations		
	RSW-001	37 42 12.00	-122 34 31.20
	RSW-002	37 42 37.80	-122 34 30.00
	RSW-004	37 42 42.00	-122 35 42.00
	RSW-006	37 40 00.00	-122 32 15.00
	RSW-025	37 42 13.80	-122 34 30.00
	RSW-028	37 41 54.00	-122 34 28.80
	RSW-031	37 43 28.80	-122 34 01.80
	Randomized Sampling		
	R1	37 52 04.77	-122 38 28.60
	R2	37 51 06.14	-122 36 00.87
	R3	37 51 04.65	-122 38 50.77
	R4	37 50 53.96	-122 40 45.11
	R5	37 50 15.84	-122 37 12.27
	R6	37 50 11.61	-122 35 41.45
	R7	37 49 40.86	-122 39 18.05
	R8	37 49 19.20	-122 41 25.50
	R9	37 48 31.68	-122 37 29.76
	R10	37 47 48.31	-122 29 57.44
	R11	37 47 10.02	-122 30 46.18
	R12	37 47 07.88	-122 36 57.88
	R13	37 46 39.77	-122 34 22.04
	R14	37 46 29.37	-122 38 38.38
	R15	37 46 23.73	-122 32 08.26
	R16	37 45 39.83	-122 37 04.52
	R17	37 45 33.87	-122 38 55.98
	R18	37 45 24.69	-122 33 44.13
	R19	37 45 00.01	-122 39 56.01
	R20	37 44 46.38	-122 35 55.51

	R21	37 43 43.07	-122 31 11.61
	R22	37 43 04.34	-122 38 42.51
	R23	37 42 59.44	-122 32 47.41
	R24	37 42 56.50	-122 34 15.08
	R25	37 42 41.24	-122 36 28.29
	R26	37 42 33.84	-122 31 08.82
	R27	37 42 15.49	-122 34 55.24
	R28	37 41 35.66	-122 32 11.82
	R29	37 41 20.89	-122 36 06.47
	R30	37 40 55.35	-122 33 29.05
	R31	37 40 56.18	-122 37 43.15
	R32	37 39 31.65	-122 33 41.41
	R33	37 39 14.63	-122 32 04.75
	R34	37 38 02.91	-122 32 27.99
	R35	37 37 42.23	-122 36 40.08
	R36	37 37 34.73	-122 33 53.51
	R37	37 37 00.97	-122 36 55.75
	R38	37 36 52.15	-122 35 28.81
	R39	37 36 32.16	-122 32 01.35
	R40	37 36 16.73	-122 33 03.03
Overflows And Bypasses	OV-1 through OV- <i>n</i> ^[3,4]	Points in the collection system including manholes, pump stations, or any location where overflows and bypasses occur.	

- [1] Monitoring at this location is not required during the term of the Beneficial Uses Survey/Dilution Study Period described in this Order, Section VI.C.5 (Other Special Provisions).
- [2] Receiving water monitoring is conducted through a coordinated effort with the City of San Francisco at these locations. Sampling will be conducted annually in the fall during the period when sediments are least disturbed and may show the highest concentrations of contaminants.
- [3] A map and description of each known overflow or bypass location shall accompany the annual report for each calendar year.
- [4] Each occurrence of an overflow or bypass shall be reported to the Regional Water Board in accordance with the reporting requirements specified in Section X.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location A-001

1. The Discharger shall monitor influent to the facility at A-001 as follows:

Table 2. Influent Monitoring

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Continuous	--	--
CBOD ₅ ^[3]	mg/L kg/day	C-24	1X / Week	405.1
TSS ^[4]	mg/L kg/day	C-24	2X / Week	160.2
Oil & Grease	mg/L kg/day	C-24	1X / Quarter	1664

[1] Unit Abbreviations:

mgd = million gallons per day
mg/L = milligrams per liter
kg/day = kilograms per day

[2] Sample Type Abbreviations:

C-24 = 24-hour composite

[3] 5-Day Carbonaceous Biochemical Oxygen Demand at 20° C

[4] Total Suspended Solids

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location E-001

1. The Discharger shall monitor treated effluent at E-001 at as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table 3. Effluent Monitoring E-001

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method ^[3]
Flow Rate	mgd	Continuous	Continuous	---
CBOD ₅	mg/L	C-24	1X / Week	405.1
TSS	mg/L	C-24	2X / Week	160.2
Settleable Solids	mg/L	C-24	2X / Week	160.5
Oil & Grease	mg/L	Grab	1X / Month	1664
Turbidity	NTU	C-24	1X / Day	180.1
Chronic Toxicity 96-hr. ^[4]	TUc	C-24	1X / Quarter	821-R-02-012
Ammonia Nitrogen	mg/L, kg/day	Grab	2X / Month	350.3
pH	pH units	Grab	1X / Day	150.1 or 9040
Dissolved Oxygen	mg/l, % saturation	Grab	1X / Day	---
Total Chlorine Residual ^[5]	mg/L	Grab	2X / Hour	---
Temperature	°C	Grab	1X / Day	---
Sulfides (if DO < 5.0 mg/l) Total and Dissolved	mg/L	Grab	1X / Day	376.2
All Applicable Standard Observations ^[6]	---	Grab	1X / Day	---
Heptachlor	µg/l	C-24	1X / Quarter ^[7]	608
Priority Pollutants ^[8]	µg/l	C-24	1X / Year	^[9]

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method ^[3]
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[1] Unit Abbreviations:

mg/L	=	milligrams per liter
kg/day	=	kilograms per day
µg/l	=	micrograms per liter
NTU	=	Nephelometric Turbidity Units
% Saturation	=	percent saturation of dissolved oxygen in water
MPN/100 ml	=	Most Probable Number per 100 milliliters
°C	=	degree centigrade

[2] Sample Type Abbreviations:

Continuous	=	Measured continuously, and recorded and reported daily
C-24	=	24-hour composite
Grab	=	Grab sample

[3] or other equivalent test method as specified in 40 CFR 136

[4] TU_c shall be measured using the critical life stage toxicity tests specified in Appendix III of the Ocean Plan.

[5] The total chlorine residual effluent limit will be suspended during the Beneficial Uses Survey/Dilution Study Period described in this Order, Section VI.C.5 (Other Special Provisions).

[6] Discharger shall record standard observations of effluent, including color, presence of sheen or foam, etc.

[7] If four consecutive effluent samples are non-detect (ND) for heptachlor, effluent monitoring for heptachlor shall be reduced to 1X / year, as for all other priority pollutants. If, at any time, monitoring detects the presence of heptachlor, the sampling frequency shall revert to 1X/ quarter.

[8] All pollutants listed in Table B of the Ocean Plan (2005), except chronic toxicity, total chlorine residual and heptachlor as noted above.

[9] As specified in Appendix III of the Ocean Plan (2005).

B. Monitoring Location E-001-D

1. The Discharger shall monitor treated effluent at E-001-D as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table 4. Effluent Monitoring E-001-D

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method ^[3]
Total Coliform ^[4]	MPN/100 ml	Grab	1X / Week	1600 Series
Total Chlorine Residual ^[4]	mg/L	Grab	2X / Hour	---

Parameter	Units ^[1]	Sample Type ^[2]	Minimum Sampling Frequency	Required Analytical Test Method ^[3]
[1] <u>Unit Abbreviations:</u> mg/L = milligrams per liter MPN/100 ml = Most Probable Number per 100 milliliters				
[2] <u>Sample Type Abbreviations:</u> Grab = Grab sample				
[3] or other equivalent test method as specified in 40 CFR 136				
[4] The Total Coliform and Total Chlorine Residual effluent limits will be suspended during the Beneficial Uses Survey/Dilution Study Period described in this Order, Section VI.C.5 (Other Special Provisions).				

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Effluent Monitoring Program

1. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100 percent effluent samples in accordance with Appendix III of the Ocean Plan; and using either EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, Third Edition, October 2002 (EPA/821/R-02-014); or EPA's *Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms*, August, 1995 (EPA/600/R-95/136).
2. Effluent samples shall be collected after all treatment processes, including dechlorination, and before discharge to the receiving water.

Test Species and Methods:

- a. The Discharger shall conduct tests as follows: with a minimum of three test species, if possible including a vertebrate, an invertebrate, and an aquatic plant, for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.
- b. Re-screening is required every 15 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive then re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

B. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Discharger must re-sample and re-test at the earliest time possible.
3. Control and dilution water should be obtained from an unaffected area of the receiving waters. If the dilution water used is different from the culture water, a second control using culture water shall be used.

C. Accelerated Monitoring

1. If toxicity exceeds the limitations (as defined in Section IV.A), of this Order, then the Discharger shall conduct six additional tests, approximately every 7 days, over a 6-week period. The samples shall be collected and the tests initiated no less than 7 days apart. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the close of the test and the additional tests shall begin within 3 business days of the receipt of the result. If the accelerated testing shows consistent exceedance of the toxicity limit as defined in Section IV.A, the Discharger shall immediately implement the Initial Investigation of the Toxicity Reduction Evaluation (TRE) Workplan. If none of the three tests indicate toxicity, then the Discharger may return to the normal testing frequency.
2. If implementation of the initial investigation TRE Workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger may discontinue the Toxicity Identification Evaluation (TIE).

D. Steps in TRE and TIE Procedures

1. Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the facility's initial investigation TRE workplan. At a minimum, the Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. The Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of the trigger, which will include, but not be limited to:
 - a. Further actions to investigate and identify the cause of toxicity;
 - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
 - c. Standards the Discharger will apply to consider the TRE complete and to return to normal sampling frequency; and,
 - d. A schedule for these actions.
2. The following is a stepwise approach in conducting the TRE:
 - a. Step 1 - Basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE:

- b. Step 2 - Evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;
- c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts and using currently available TIE methodologies. The objective of the TIE is to identify the substance or combination of substances causing the observed toxicity;
- d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;
- e. Step 5 evaluates in-plant treatment options; and,
- f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of implementation of these control measures may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there is no longer toxicity (or six consecutive chronic toxicity results are less than or equal to 1.0 TUC).

- 3. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance.
- 4. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by section V.C.1 of this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
- 5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.
- 6. The Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

E. Reporting

- 1. Chronic Toxicity. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the DMR. Routine reporting shall include, at a minimum, as applicable, for each test:
 - a. Sample date(s);

- b. Test initiation date;
 - c. Test species;
 - d. End point values for each dilution (e.g., number of young, growth rate, percent survival);
 - e. NOEC value(s) in percent effluent;
 - f. IC₁₅, IC₂₅, IC₄₀ and IC₅₀ values in percent effluent;
 - g. TU_c values $\left(TU_c = \frac{100}{NOEC}\right)$;
 - h. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
 - i. NOEC and LOEC values for reference toxicant test(s);
 - j. C25 value for reference toxicant test(s);
 - k. Any applicable charts; and
 - l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
2. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from all samples collected during that year.

The Discharger shall notify by telephone or electronically, this Regional Water Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable.

VII. RECLAMATION MONITORING REQUIREMENTS

The Discharger shall comply with all applicable requirements for recycled water, as specified in Title 22 of the California Code of Regulations Division 4, Chapter 3, and as specified in General Water Reuse Order 96-011.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring Locations

1. The Discharger shall monitor the Pacific Ocean at fixed monitoring locations RSW-1, RSW-2, RSW-4, RSW-6, RSW-25, RSW-28, RSW-31, and randomized monitoring at points R-1 through R-40 as follows:

Table 5. Receiving Water Monitoring Requirements

Parameter	Units ^[1]	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method ^[2]
Ammonia Nitrogen	mg/L	Grab	1X / Year	350.3
pH	pH Units	Grab	1X / Year	150.1 or 9040
Dissolved Oxygen	mg/L, % saturation	Grab	1X / Year	--
Temperature	°C	Grab	1X / Year	--
Fecal Coliform	MPN/100 ml	Grab	1X / Year	1600 Series
Salinity	ppt	Grab	1X / Year	--
Priority Pollutants	µg/L	Grab	1X / Year	--

[1] Unit Abbreviations:

mg/L	=	milligrams per liter
µg/l	=	micrograms per liter
% Saturation	=	percent saturation of dissolved oxygen in water
MPN/100 ml	=	Most Probable Number per 100 milliliters
°C	=	degree centigrade
ppt	=	parts per thousand

[2] or other equivalent test method as specified in 40 CFR 136

IX. OTHER MONITORING REQUIREMENTS

A. Monitoring Locations – Miscellaneous Observations

During each occurrence of an overflow or bypass within the collection system, including manholes and pump stations, the Discharger shall make visual observations of the bypass or overflow event, including estimates of flow volume, duration, water bodies impacted, and corrective actions taken. Observations shall be recorded and routinely reported in SMRs. As described in Section II of this MRP, “overflow and bypass locations” shall be identified as location Nos. OV-1, OV-2, OV-3, etc. and shall be described on a sketch that accompanies SMRs.

B. Increased Monitoring Frequency

If any sample is in violation of effluent limitations sampling for that parameter shall be increased to weekly until compliance with the effluent limitation is demonstrated, or until the performance goal is met, in two successive samples.

C. Beneficial Uses Survey/Dilution Study

- a. The Discharger shall conduct monitoring for the Beneficial Uses Survey/Dilution Study in accordance with the Study’s Monitoring Plan.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachments D and G) related to monitoring, reporting, and recordkeeping, except as otherwise specified below.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.
2. The Discharger shall submit monthly Self Monitoring Reports including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. Monthly reports shall be due no later than 30 days after the end of each calendar month.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table 6. Monitoring and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	Effective date of permit	All	First day of second calendar month following month of sampling
2X / Hour	Effective date of permit	Hour	First day of second calendar month following month of sampling
1X / Day	Effective date of permit	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	First day of second calendar month following month of sampling
2X / Week	Effective date of permit	Sunday through Saturday	First day of second calendar month following month of sampling
5X / Week	Effective date of permit	Sunday through Saturday	First day of second calendar month following month of sampling
2X / Month	Effective date of permit	1 st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling
1X / Month	Effective date of permit	1 st day of calendar month through last day of calendar month	First day of second calendar month following month of sampling
1X / Quarter	Effective date of permit	March, June, September and December	First day of second calendar month following month of sampling
2X / Year	Effective date of permit	March 1 through March 31 September 1 through September 30	May 1 November 1
1X / Year	Effective date of permit	January 1 through December 31	February 1

4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. The Dischargers shall instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. The Discharger shall not use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.
5. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations.
 6. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 7. SMRs must be submitted to the Regional Water Board, signed and certified as required by the standard provisions (Attachment D), to the address listed below:

Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN: NPDES Permit Division

8. The Discharger has the option to submit all monitoring results in an electronic reporting format approved by the Executive Officer. The Electronic Reporting System (ERS) format includes, but is not limited to, a transmittal letter, summary of violation details and corrective actions, and transmittal receipt. If there are any discrepancies between the ERS requirements and the "hard copy" requirements listed in the MRP, then the approved ERS requirements supersede.

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit discharge monitoring reports (DMRs) in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

State Water Resources Control Board
Discharge Monitoring Report Processing Center
Post Office Box 671
Sacramento, CA 95812

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

D. Other Reports

1. **Annual Reports.** By February 1st of each year, the Discharger shall submit an annual report to the Regional Water Board covering the previous calendar year. The report shall contain the items described in *Standard Provisions and Reporting Requirements, and SMP Part A, August 1993* (Attachment G).

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	2 417021001
Discharger	North San Mateo County Sanitation District
Name of Facility	North San Mateo County Sanitation District WWTP
Facility Address	153 Lake Merced Boulevard
	Daly City, CA 94015
	San Mateo County
Facility Contact, Title and Phone	Patrick Sweetland, Director, (650) 991-8200
Authorized Person to Sign and Submit Reports	Patricia Martel, City Manager/District General Manager, (650) 991-8200
Mailing Address	333 90 th Street, Daly City, CA 94015
Billing Address	SAME
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	N
Reclamation Requirements	Order 92-011
Facility Permitted Flow	8 MGD (dry weather peak capacity)
Facility Design Flow	8 MGD (dry weather peak capacity)
	25 MGD (wet weather peak capacity)
Watershed	North San Mateo Coastal Watershed
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

- A. The North San Mateo County Sanitation District (hereinafter Discharger) is the owner and operator of the North San Mateo County Sanitation District Wastewater Treatment Plant (hereinafter Facility), a publicly owned treatment works.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B. The Facility discharges secondary treated wastewater to the Pacific Ocean, a water of the United States, and is currently regulated by Order 00-017, which was adopted on March 15, 2000 and expired on March 15, 2005. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.
- C. The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for renewal of its WDRs and NPDES permit on September 15, 2004. Supplemental information was requested on January 4, 2006 and received on January 14, 2006.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Sludge Treatment or Controls

The Discharger owns and operates the North San Mateo County Sanitation District Wastewater Treatment Plant, which provides secondary treatment of domestic wastewater from the City of Daly City, portions of San Mateo County, the Town of Colma, San Francisco County Jail, and the Westborough Water District within the City of South San Francisco. A portion of the effluent receives tertiary treatment for water reclamation projects. The combined service population is approximately 120,000. Approximately 180 miles of sanitary sewer lines and seven lift stations convey domestic sewage to the facility. Treated wastewater is discharged to the Pacific Ocean through the Vista Grande Tunnel structure and a 27” force main located on Ocean Beach in San Francisco County. Final discharge is through a submerged diffuser extending 2,500 feet from the shoreline and terminating at a depth of approximately 32 feet (-32 MLLW). An initial dilution ratio of 70:1 is achieved.

The treatment system includes bar screens, a micro screen and compactor, primary clarifiers, equalization basins, aeration tanks, secondary clarifiers, and a chlorine contact chamber. The treatment system may be operated using sodium hypochlorite for chlorination and sodium bisulfate for dechlorination. Disinfection by chlorination and dechlorination was suspended in 2001 to enable the facility to conduct a bacteriological assessment study as required by Order No. 00-017. Chlorination and dechlorination are suspended during the Beneficial Uses Survey/Dilution Study pursuant to the terms of this Order. Tertiary treatment provides up to 2.77 MGD of recycled water for uses such as, but not limited to golf courses, median strips and parks. The tertiary treatment system includes alum injection followed by dual media filtration, disinfection, gypsum injection and a 1.4 million gallon (mg) storage basin. Solids are directed to a degritter, gravity and air floatation thickeners, and an anaerobic digester prior to being dewatered by centrifuge and hauled off site for disposal.

The treatment plant has a peak dry weather treatment capacity of 8 MGD and a peak wet weather capacity of 25 MGD. The facility discharges an annual average flow of 6.85 MGD.

B. Discharge Points and Receiving Waters

Treated wastewater is discharged to the Pacific Ocean through the Vista Grande Tunnel structure and a 27" force main located on Ocean Beach in San Francisco County. Final discharge is through a submerged diffuser extending 2,500 feet from the shoreline and terminating at a depth of approximately 32 feet (-32 MLLW). An initial dilution ratio of 70:1 is achieved.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

Effluent limitations contained in the existing Order for discharges Discharge Point 001 and representative monitoring data from the term of the previous Order are as follows:

Table 2. Historic Effluent Limitations and Monitoring Data

Parameter ^[1]	Units	Effluent Limitation				Monitoring Data (From 9/2000 to 12/2005)	
		Average Monthly	Average Weekly	Daily Average	Max at any Time	Highest Average Daily	Highest Max at any Time
CBOD ₅ at 20° C	mg/l	25	40	50	---	39.5	--
Total Suspended Solids	mg/l	30	45	60	---	--	180
Oil & Grease (mg/l)	mg/l	25	40	--	75	--	27
Settleable Solids	ml/l-hr	1.0	1.5	--	3.0	--	1.0
Turbidity	NTU	75	100	---	225	--	175
pH	s.u.	Within a range of 6.0 – 9.0					
Acute Toxicity	TU _a	1.5	2.0	--	2.5	--	1.02

[1] Order 00-017 exempted the Discharger from Total Coliform limitations while a Bacteriological Assessment Study was conducted.

D. Compliance Summary

The following table summarizes the number of effluent limitation exceedances for Discharge Point 001 during the previous permit period.

Table 3. Compliance Summary

Parameter ^[1]	Number of Exceedances				
	2001	2002	2003	2004	2005
Total Suspended Solids (Monthly average)		1			
Total Suspended Solids (Weekly Average)		1			
Total Suspended Solids (Daily Average)		3			
Total Suspended Solids (85 percent removal)		1			
Total Coliform (Daily)	1				
Dissolved Oxygen		1			

[1] Parameters not listed did not exceed effluent limitations during the period from 9/2001 – 12/2005.

E. Planned Changes

Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a *Water Quality Control Plan for the San Francisco Basin* (Region 2) (hereinafter, the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan was amended on January 21, 2004 by Resolution No. R2-2004-003. This amendment was approved by the State Water Board and the Office of Administrative Law on July 22, 2004, and October 4, 2004, respectively. USEPA gave final approval to the amendment on January 5, 2005.

Beneficial uses as described by the Basin Plan for coastal waters are as follows:

Table 4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Water contact recreation, noncontact water recreation; industrial service supply; navigation; marine habitat; shellfish harvesting; ocean, commercial and sport fishing; and preservation of rare and endangered species.

Requirements of this Order implement the Basin Plan.

2. **Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of

California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for ocean waters

3. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 20, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table 5. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting

In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 CFR § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
5. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on certain pollutants as specified in federal regulations and discussed in the Fact Sheet (Attachment F). The permit's technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations (WQBELs) have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual

pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

6. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
7. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations, section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

D. Impaired Water Bodies on CWA 303(d) List

The Pacific Ocean at Ocean Beach is not on the 303(d) list as an impaired water body.

E. Other Plans, Policies and Regulations

Not Applicable.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

A. Discharge Prohibitions

1. Prohibition III.A (No discharge except as contemplated by this Order and/or as described by the Discharger). This prohibition is based on CWC Section 13260, which requires submittal of a ROWD, including all information required by the Regional Water Board, by any person discharging waste to waters of the State. Discharges not described by the Discharger in its ROWD, and therefore not contemplated by the Regional Water Board in issuing this Order, are viewed as unauthorized discharges to waters of the State.
2. Prohibition III.B (No discharge in excess of design flow capacities). Order No. 00-017 prohibited flows in excess of the facility's average dry weather capacity of 8.0 MGD. Order No. R2-2006-xxxx expands on this prohibition to prohibit flows in excess of the facility's peak wet weather (25 MGD) capacity. The prohibition assures adequate treatment of wastewater in all circumstances anticipated by the facility's design and, in effect, requires the Discharger to increase treatment capacities when actual flows approach/exceed current design capacity.
3. Prohibition III.C (No discharges which are not authorized by an NPDES permit). This prohibition reflects the CWA's [Section 301 (a)] prohibition against the discharge of pollutants except in compliance with CWA permitting requirements.
4. Prohibition III.D (No discharge of sludge or untreated supernatant). This prohibition is based on Ocean Plan prohibitions against the pipeline discharge of sludge or untreated sludge supernatant to ocean waters [Ocean Plan Section III.H.3].
5. Prohibitions III.E through III.I (No discharge of substances that may degrade the receiving water environment). These prohibitions are based on the Ocean Plan Program of Implementation—General Provisions [Ocean Plan Section III.A].
6. Prohibition III.J (No discharge of radiological, chemical, or biological warfare agents or high-level radioactive substances). This prohibition is based on the Ocean Plan prohibition against the discharge of radiological, chemical, or biological warfare agents [Ocean Plan Section III.H.1].
7. Prohibition III.K (No discharge to Areas of Special Biological Significance). This prohibition is based on the Ocean Plan prohibition against discharges of treated wastewater to Areas of Special Biological Significance [Ocean Plan Section III.H.2]. Discharges must be located a sufficient distance from designated areas to ensure maintenance of water quality conditions. No such areas have been designated in the vicinity of the discharge location.
8. Prohibition III.L (No bypass of untreated waste). This prohibition is based on the Ocean Plan prohibition against the bypass of untreated wastes that contain concentrations of pollutants in excess of the effluent limitations and water quality objectives listed in Table A or Table B [Ocean Plan Section III.H.4].

B. Technology-Based Effluent Limitations

NPDES regulations at 40 CFR 122.44 (a) require that permits include applicable technology-based limitations and standards. This Order includes such limitations based on the minimum level of

effluent quality attainable by secondary treatment, as established at 40 CFR 133. This Secondary Treatment Regulation includes requirements for BOD₅, suspended solids, and pH. The State Water Board, in Table A of the Ocean Plan, has supplemented these technology based requirements with additional requirements for conventional pollutants (settleable matter, oil and grease), which are applicable to the Facility.

Regulations promulgated at 40 CFR 125.3 (a) (1) require technology-based effluent limitations for municipal dischargers to be placed in NPDES permits based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards. Where the USEPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA Section 402 (a) (1) and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

1. **Carbonaceous Biochemical Oxygen Demand (5-day).** Effluent limitations for CBOD₅, including 85 percent removal, are retained from the expiring permit (Order No. 00-017). These limitations are based on secondary treatment requirements at 40 CFR Part 133.102(a). In its application for renewed waste discharge requirements, the Discharger requested the elimination of the effluent limitation for CBOD₅ based on its presumption of a direct correlation between TSS and CBOD₅ values. Secondary treatment requirements at 40 CFR Part 133.102(a) require effluent limitations for BOD₅ or, as a substitute, CBOD₅ (40 CFR Part 133.102(a)(1)).
2. **Total Suspended Solids.** Effluent limitations for TSS, including 85 percent removal, are retained from the expiring permit (Order No. 00-017). These limitations are based on secondary treatment requirements at 40 CFR § 133.102(b). The 85 percent removal requirement is more stringent than the Ocean Plan requirement of 75 percent removal.
3. **Oil and Grease.** Effluent limitations for O&G are retained from the expiring permit (Order No. 00-017). These limitations are based on Ocean Plan implementation requirements in Table A.
4. **Turbidity.** Effluent limitations for turbidity are retained from the expiring permit (Order No. 00-017). These limitations are based on Ocean Plan implementation requirements in Table A.
5. **Total Chlorine Residual.** An effluent limitation for chlorine was not included in Order No. 00-017. A limitation is included in this Order based on Ocean Plan implementing provisions in Section III. However, the effluent limitation for chlorine is suspended during the Beneficial Uses Survey/Dilution Study Period described in this Order, Section VI.C.5 (Other Special Provisions).
6. **pH.** This effluent limitation is unchanged from the previous permit, and is based on the requirements of Table A of the Ocean Plan.
7. **Settleable Solids.** This effluent limitation is unchanged from the previous permit, and is based on the requirements of Table A of the Ocean Plan.

8. **Total Coliform Bacteria.** Limitations for total coliform bacteria from Order No. 00-017 are retained by this Order. However, the total coliform bacteria effluent limitation is suspended during the Beneficial Uses Survey/Dilution Study Period described in this Order, Section VI.C.5 (Other Special Provisions).

Table 6. Summary of Effluent Limitations

Parameter	Units	Effluent Limitations ^[1]					
		Average Monthly	Average Weekly	Average Daily	6-month Median	Maximum Daily	Instantaneous Maximum
Carbonaceous Biochemical Oxygen Demand 5-day @ 20°C	mg/L	25	40	50	--	--	--
	kg/day				--	--	--
Total Suspended Solids	mg/L	30	45	60	--	--	--
	kg/day				--	--	--
Oil and Grease	mg/L	25	40	--	--	--	75
	kg/day			--	--	--	--
Settleable Solids	ml/L	1.0	1.5	--	--	--	3.0
Turbidity	NTU	75	100	--	--	--	225
Chronic Toxicity ^[2]	TU _c	--	--	--	--	71	--

[1] Mass emission limitations are based on a peak dry weather capacity of 8 mgd. Weekly and monthly mass effluent limitations shall be calculated by averaging the reported daily values over the relevant number of days for the monitoring interval.

[2] Expressed as Chronic Toxicity Units (TU_c)

TU_c = 100/NOEC where:

NOEC (No Observed Effect Concentration) is expressed as the maximum percent effluent or receiving water that causes no observable effect on the test organism as determined by the result of a critical life state toxicity test listed in Appendix III of the Ocean Plan (2005) adopted and effective February 14, 2006.

- a. **85 Percent Removal:** The arithmetic mean of the CBOD₅ and TSS values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.
- b. **pH:** The pH of the discharge shall not exceed 9.0 nor be less than 6.0.
- c. **Total Coliform Bacteria:** The treated wastewater, prior to discharge, shall not exceed a geometric mean value of 2,400 MPN/100 ml for any five consecutive samples. No single sample may exceed 24,000 MPN/100 ml.
- d. **Interim Effluent Limitations**

Interim Total Coliform Bacteria Limit: Effluent Limitation A.1.e (Total Coliform Bacteria) shall be suspended during the Beneficial Uses Survey/Dilution Study period as proposed in this Order, Section VI.C.5.b. During the study period, the discharger shall comply with Coliform requirements specified in Receiving Water Limitations, Sections V.A.1 and V.A.3 of this Order.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

- a. NPDES regulations at 40 CFR 122.44 (d) (1) require permits to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs, when necessary, is intended to protect the designated uses of the receiving water and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, the NTR, and the CTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. Basin Plan

The Basin Plan identifies the following beneficial uses for the coastal waters of the Region.

- (1) industrial service supply
- (2) navigation
- (3) contact and non-contact water recreation
- (4) ocean, commercial and sport fishing
- (5) marine habitat
- (6) shellfish harvesting
- (7) preservation of rare and endangered species

b. Ocean Plan

The Basin Plan for the San Francisco Bay Region requires that all discharges to ocean waters comply with applicable requirements of the Ocean Plan (2005), which establishes beneficial uses and water quality objectives, as well as procedures for their implementation, to protect the quality of the State's ocean waters. Order No. 00-017 was written using the guidance of the 1997 Ocean Plan, while this Order has been written using the guidance of the updated (2005) Ocean Plan.

For all ocean waters of the State, the Ocean Plan establishes the following beneficial uses.

- (1) industrial water supply
- (2) navigation

- (3) contact and non-contact water recreation, including aesthetic enjoyment
- (4) commercial and sport fishing
- (5) mariculture
- (6) preservation and enhancement of Areas of Special Biological Significance
- (7) fish spawning and shellfish harvesting
- (8) rare and endangered species
- (9) marine habitat
- (10) fish migration

The Ocean Plan includes general provisions and water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The water quality objectives from the Ocean Plan have been incorporated as receiving water limitations into this Order. In addition, Table B of the Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 CFR 122.44 (d) (1) and in accordance with procedures established by the Ocean Plan (2005), the Regional Water Board has performed a reasonable potential analysis to determine the need for effluent limitations for the Table B toxics – for those pollutants which are present in effluent from the North San Mateo County Sanitation District WWTP at concentrations exceeding or having the reasonable potential to exceed or contribute to exceedances of applicable water quality objectives.

3. **Determining the Need for WQBELs**

Procedures for performing a reasonable potential analysis (RPA) for ocean dischargers are described in Section III. C. and Appendix VI of the Ocean Plan. In general, the procedure is a statistical method that projects an effluent data set while taking into account the averaging period of water quality objectives, the long term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of the effluent data set, and compares the 95th percentile concentration at the 95% confidence level of each Table B pollutant after accounting for dilution to its applicable water quality criterion. The RPA may result in one of three following endpoints.

Endpoint 1 – There is “reasonable potential,” and a WQBEL and monitoring are required.

Endpoint 2 - There is no “reasonable potential.” WQBELs are not required, and monitoring is required at the discretion of the Regional Water Board.

Endpoint 3 - The RPA is inconclusive. Existing WQBELs are retained, and monitoring is required.

The State Water Resources Control Board has developed a reasonable potential calculator, which is available at <http://www.waterboards.ca.gov/plnspols/oplans/docs/rpcalc.zip>. The calculator (RPcalc) was used in the development of this Order and considers several pathways in the determination of reasonable potential.

a. First Path

If available information about the receiving water or the discharge supports a finding of reasonable potential without analysis of effluent data, the Regional Water Board may decide that WQBELs are necessary after a review of such information. Such information may include: the facility or discharge type, solids loading, lack of dilution, history of compliance problems, potential toxic effects, fish tissue data, 303 (d) status of the receiving water, or the presence of threatened or endangered species or their critical habitat, or other information.

b. Second Path

If any pollutant concentration, adjusted to account for dilution, is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

c. Third Path

If the effluent data contains 3 or more detected and quantified values (i.e., values that are at or above the ML), and all values in the data set are at or above the ML, a parametric RPA is conducted to project the range of possible effluent values. For each pollutant, the 95th percentile concentration is determined at a high degree of confidence (95 percent) and compared to the most stringent applicable water quality objective to determine reasonable potential. A parametric analysis assumes that the range of possible effluent values is distributed lognormally. If the 95th percentile value is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

d. Fourth Path

If the effluent data contains 3 or more detected and quantified values (i.e., values that are at or above the ML), but at least one value in the data set is less than the ML, a parametric RPA is conducted according to the following steps.

- (1) If the number of censored values (those expressed as a “less than” value) account for less than 80 percent of the total number of effluent values, calculate the M_L (the mean of the natural log of transformed data) and S_L (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described for the Third Path, above.

- (2) If the number of censored values account for 80 percent or more of the total number of effluent values, conduct a non-parametric RPA, as described for the Fifth Path, below. (A non-parametric analysis becomes necessary when there is limited effluent data, and no assumptions can be made regarding the possible distribution of effluent data.)

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than 3 detected and quantified values, or when the effluent data set contains 3 or more detected and quantified values but the number of censored values account for 80 percent or more of the total number of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable water quality objective, and accounting for ties. The sample number is reduced by one for each tie, when the dilution adjusted method detection limit (MDL) is greater than the water quality objective. If the adjusted sample number, after accounting for ties, is greater than 15, the pollutant has no reasonable potential to exceed the water quality objective. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and existing effluent limits are retained (if the expiring permit includes limits).

The following table presents results of the RPA, performed in accordance with procedures described by the Ocean Plan (2005) and summarized above, for the North San Mateo County Sanitation District WWTP. The RPA endpoint for each Table B pollutant is identified. The RPA showed “reasonable potential” for one Table B pollutant, heptachlor. Although the RPA showed “reasonable potential” for heptachlor, the Regional Water Board has not established an effluent limit for heptachlor at this time because it is infeasible for the Discharger to achieve immediate compliance. Pursuant to the Basin Plan’s provisions for the establishment of compliance schedules, this Order establishes a compliance schedule that includes special monitoring for heptachlor. As the following table highlights, the RPA commonly leads to Endpoint 3, meaning that the RPA is inconclusive, when a majority of the effluent data is reported as ND (not detected). In these circumstances, the Regional Water Board views the “inconclusive” result as an indication of no concern for a particular pollutant; however, additional monitoring will be required for those pollutants during the term of the reissued permit.

Table 7. Reasonable Potential Analysis Results

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Objectives for Protection of Marine Aquatic Life					
Arsenic	8	24	24	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Cadmium	1	24	24	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Chlorinated Phenolics	1	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Chromium (VI)	2	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Copper	3	23	14	23	Endpoint 2 – No Reasonable Potential, 95 th percentile less than WQO
Cyanide	1	24	23	10	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Endosulfan (total)	0.009	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Endrin	0.002	No Effluent Data			Endpoint 3 – RPA is Inconclusive, No Effluent Data
HCH	0.004	5	3	0.0375	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Lead	2	36	36	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Mercury	0.04	24	24	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Nickel	5	25	25	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Non-chlorinated Phenolics	30	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Selenium	15	24	24	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Silver	0.7	24	24	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Zinc	20	24	19	59	Endpoint 2 – No Reasonable Potential, 95 th percentile less than WQO
Objectives for Protection of Human Health – Noncarcinogens					
1,1,1-Trichloroethane	540000	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
2,4-Dinitrophenol	4.0	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
2-Methyl-4,6-Dinitrophenol	220	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Acrolein	220	4	4	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Antimony	1200	6	6	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Bis(2-Chloroethoxy)Methane	4.4	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Bis(2-Chloroisopropyl)Ether	1200	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Chlorobenzene	570	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Chromium (III)	190000	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Dichlorobenzenes	5100	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Diethyl Phthalate	33000	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Dimethyl Phthalate	820000	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Di-n-Butyl Phthalate	3500	No Effluent Data			Endpoint 3 – RPA is Inconclusive, No Effluent data
Ethylbenzene	4100	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Fluoranthene	15	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Hexachlorocyclopentadiene	58	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Nitrobenzene	4.9	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Thallium	2	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Toluene	85000	5	3	1.4	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Tributyltin	0.0014	No Effluent Data			Endpoint 3 – RPA is Inconclusive, No Effluent data
Objectives for Protection of Human Health – Carcinogens					
1,1,2,2-Tetrachloroethane	2.3	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
1,1,2-Trichloroethane	9.4	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
1,1-Dichloroethylene	0.9	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
1,2-Dichloroethane	28	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
1,2-Diphenylhydrazine	0.16	3	3	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
1,3-Dichloropropylene	8.9	4	4	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
1,4 Dichlorobenzene	18	5	4	2	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
2,3,7,8-TCDD (Dioxin)	3.9E-9	3	3	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
2,4,6-Trichlorophenol	0.29	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
2,4-Dinitrotoluene	2.6	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
3,3'-Dichlorobenzidine	0.0081	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Acrylonitrile	0.10	4	4	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Aldrin	2.2E-5	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Benzene	5.9	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Benzidine	6.9E-5	4	4	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Beryllium	0.033	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND

Table B Pollutant	Most Stringent WQO (µg/L)	No. of Samples	No. of Non-Detects	Max Effluent Conc. (µg/L)	RPA Result, Comment
Bis(2-Chloroethyl)Ether	0.045	4	4	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Bis(2-Ethylhexyl)Phthalate	3.5	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Carbon Tetrachloride	0.90	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Chlordane	2.3E-5	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Chlorodibromomethane	8.6	5	4	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Chloroform	130	5	2	7.6	Endpoint 2 – No Reasonable Potential, 95 th percentile less than WQO
DDT (total)	0.00017	3	3	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Dichlorobromomethane	6.2	5	4	1.0	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Dieldrin	0.00004	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Halomethanes	130	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Heptachlor	0.00005	5	3	0.033	Endpoint 1 - An effluent limitation must be developed for the pollutant.
Heptachlor Epoxide	0.00002	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Hexachlorobenzene	0.00021	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Hexachlorobutadiene	14	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Isophorone	730	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Methylene Chloride	450	5	3	3.7	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
N-Nitrosodimethylamine	7.3	4	4	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
N-Nitrosodi-n-Propylamine	0.38	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
N-Nitrosodiphenylamine	2.5	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
PAHs (total)	0.0088	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
PCBs	1.9E-5	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Tetrachloroethylene	2.0	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Toxaphene	0.00021	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Trichloroethylene	27	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Vinyl Chloride	36	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND
Hexachloroethane	2.5	5	5	ND	Endpoint 3 – RPA is Inconclusive, less than 3 detects or greater than 80% ND

Notes to the table, above:

- NA indicates that effluent data is not available
- ND indicates that the pollutant was not detected.
- Minimum probable initial dilution for this Discharger is 70:1.

- Effluent data used for this RPA are from March 2001 to March 2006.
- All units are ug/L.

4. WQBEL Calculations

As described by Section III. C of the Ocean Plan, effluent limits for Table B pollutants that show reasonable potential are calculated according to the following equation.

$$C_e = C_o + D_m (C_o - C_s)$$

Where ...

C_e = the effluent limitation ($\mu\text{g/L}$)

C_o = the concentration (the water quality objective) to be met at the completion of initial dilution ($\mu\text{g/L}$).

C_s = background seawater concentration ($\mu\text{g/L}$)

D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

Except for the 5 metals in the table below, background concentrations of all Table B pollutants are considered to be zero ($C_s = 0$)

Background Seawater Concentrations

Pollutant	C_s ($\mu\text{g/L}$)
Arsenic	3.0
Copper	2.0
Mercury	0.0005
Silver	0.16
Zinc	8.0

Because the RPA for the North San Mateo County Sanitation District's WWTP showed reasonable potential for heptachlor, this Order calculates an effluent limit for heptachlor, but does not establish it because it is infeasible for the Discharger to comply at this time. Instead, this Order establishes a compliance schedule that includes special monitoring for heptachlor.

Applicable water quality objectives from the Ocean Plan are:

Pollutant	30 Day Average WQ Objective
Heptachlor	0.00005 $\mu\text{g/L}$

Using the equation, $C_e = C_o + D_m (C_s - C_s)$, a 30-day average effluent limitation for heptachlor is calculated:

$$C_e = 0.00005 + 70 (0.00005 - 0.0) = 0.0036 \mu\text{g/L (rounded to two significant digits)}$$

A mass emission limitation, as required by the Ocean Plan, is also calculated in this Order, and is calculated using a peak dry weather capacity of 8 mgd and a conversion factor of 3.78:

$$0.0000036 \text{ mg/L} * 8.0 \text{ mgd} * 3.78 = 1.1 \times 10^{-4} \text{ kg/day}$$

5. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) testing protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

Order 00-017 was based, in part, on criteria set forth in the 1997 Ocean Plan, which established acute toxicity limitations. Section III.C of the 2005 Ocean Plan requires only chronic, not acute, toxicity monitoring when the minimum initial dilution is below 100 to 1. Acute toxicity monitoring is not required at the North San Mateo County Sanitation District WWTP because Discharge Point No. 001 has a minimum initial dilution of 70 to 1. Removal of the acute toxicity limitation does not violate anti-backsliding provisions because new information (2005 Ocean Plan) is available.

6. Total Chlorine Residual

The effluent limitations for total chlorine residual are based on the following Ocean Plan water quality objectives:

Pollutant	Units	6-month Median	Daily Maximum	Instantaneous Maximum
Total Chlorine Residual	$\mu\text{g/L}$	2	8	60

Using the equation, $C_e = C_o + D_m (C_s - C_s)$, effluent limitations for total chlorine residual are calculated:

6-month median:	$C_e = 2 + 70 (2 - 0.0) = 142 \mu\text{g/L (0.14 mg/L)}$
Daily maximum:	$C_e = 8 + 70 (8 - 0.0) = 568 \mu\text{g/L (0.57 mg/L)}$
Instantaneous maximum:	$C_e = 2 + 70 (2 - 0.0) = 4260 \mu\text{g/L (4.3 mg/L)}$

Mass emission limitations, as required by the Ocean Plan, are also included in this Order, and are calculated using a peak dry weather capacity of 8 mgd and a conversion factor of 3.78:

6-month median:	$0.14 \text{ mg/L} * 8.0 \text{ mgd} * 3.78 = 4.2 \text{ kg/day}$
Daily maximum:	$0.57 \text{ mg/L} * 8.0 \text{ mgd} * 3.78 = 17 \text{ kg/day}$

D. Reclamation Specifications

As a provider of treated wastewater for irrigation, the Discharger must adhere to applicable requirements of Title 22 of the California Code of Regulations, Division 4, Chapter 3 (Water Recycling Criteria), and of General Water Reuse Order 96-011.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

1. **Receiving Water Limitations V.A.1 through V.A.15 (conditions to be avoided).** These limitations are retained from Order 00-017 and are based on the narrative/numerical objectives and implementation provisions contained in Section 3 of the Ocean Plan.

B. Groundwater

1. Not Applicable.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

The principal purposes of a monitoring program by a discharger are to:

1. Document compliance with waste discharge requirements and prohibitions established by the Regional Water Board,
2. Facilitate self-policing by the discharger in the prevention and abatement of pollution arising from waste discharge,
3. Develop or assist in the development of limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and to
4. Prepare water and wastewater quality inventories.

The MRP is a standard requirement in NPDES permits issued by the Regional Water Board, including this Order. It contains definitions of terms, specifies general sampling and analytical protocols, and sets out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board's

policies. The MRP also contains a sampling program specific for this facility. It defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide on-going characterization of influent, effluent, and receiving waters.

A. Influent Monitoring

Influent monitoring requirements for CBOD₅ and TSS are retained by this Order to allow determination of treatment removals (percent). Monitoring requirements for flow and oil and grease are also retained from Order 00-017.

B. Effluent Monitoring

1. Effluent monitoring requirements for the following pollutants are retained from the previous Order: flow, CBOD₅, TSS, settleable solids, oil and grease, turbidity, ammonia nitrogen, sulfides, and total coliform bacteria.
2. Acute toxicity limitations and subsequent monitoring requirements are removed from this Order. Chronic toxicity monitoring, as required by the Ocean Plan, is included in the MRP based on the inclusion of corresponding effluent limitations.
3. Effluent monitoring for dissolved oxygen, pH, and temperature is no longer required in 24 hour composite samples, as results may not be representative of effluent, when samples are composited over a 24 hour period. Grab samples of effluent are required for monitoring these parameters.
4. Effluent monitoring is required one time per quarter for heptachlor as it is specifically limited by this Order.
5. Sampling of all priority pollutants listed in Table B of the Ocean Plan, as required by Appendix III, must be conducted on an annual basis, at a minimum, for dischargers with effluent volumes between 1 and 10 MGD. More frequent monitoring is required for total chlorine residual, **chronic toxicity**, and heptachlor. The Discharger's average annual discharge rate of 6.85 MGD is used to determine the sampling frequency.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing is not required of the Discharger. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. **This Order includes limitations for chronic toxicity, and** therefore, monitoring requirements are included in the MRP (Attachment E) to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, Section IV.A.1.a of this Order. The requirement to conduct acute toxicity monitoring has been removed.

D. Receiving Water Monitoring

1. **Surface Water.** The MRP retains most monitoring requirements at monitoring locations RSW-1, RSW-2, RSW-4, RSW-6, RSW-25, RSW-28, RSW-31, and R-1 through R-40; **however, specific monitoring requirements for toxic pollutants are not included in the MRP.**
2. **Groundwater.**

Not Applicable.

E. Other Monitoring Requirements

Not Applicable.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D to this Order.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in this Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. **Reopener Provisions.** These provisions are based on 40 CFR 123 and allow future modification of this Order and its effluent limitations as necessary in response to updated WQOs that may be established in the future.
2. **Best Management Practices and Pollution Prevention.** This provision is based on the Ocean Plan Section III.C.9.
3. **Construction, Operation and Maintenance Specifications**
 - a. **Wastewater Facilities, Review and Evaluation, Status Reports.** This provision is based on the previous permit and the Basin Plan.
 - b. **Operations and Maintenance Manual, Review and Status Reports.** This provision is based on the Basin Plan, the requirements of 40 CFR §122, and the previous permit.

- c. **Contingency Plan, Review and Status Reports.** This provision is based on the Basin Plan, the requirements of 40 CFR §122, and the previous permit.
4. **Special Provisions for Municipal Facilities (POTWs Only)**
 - a. **Sludge Practices.** This provision is based on 40 CFR Part 503.
 - b. **Pretreatment Program.** The Discharger is exempt from pretreatment requirements under 40 CFR Part 403. A pretreatment program for the Facility was certified on June 17, 1983. By letter dated January 4, 1995 the Discharger requested that its pretreatment program be decertified and removed from the Federal Pretreatment Program. All discharges to the Facility are either domestic or commercial in nature; there are no significant industrial users.
 - c. **Sanitary Sewer Overflows and Sewer System Management Plan.** This provision is to explain this Order's requirements as they relate to the Discharger's collection system, and to promote consistency with the State Water Resources Control Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Overflow (SSO WDRs) and a related Monitoring and Reporting Program (Order No. 2006-0003-DWQ). The bases for these requirements are described elsewhere in this Fact Sheet for those requirements.
5. **Other Special Provisions**
 - a. **Beneficial Uses Survey/Dilution Study.** In its application for renewed waste discharge requirements, the Discharger requested elimination of bacteria effluent limitations. A provision of Order 00-017 required the Discharger to conduct a bacteriological assessment study to ascertain whether effluent that has not been disinfected will be sufficiently protective of receiving water quality objectives. Data provided by the discharger demonstrates borderline compliance or near compliance with Ocean Plan water quality objectives, but does not conclusively prove that disinfection is unnecessary. The Regional Water Board has agreed to suspend the total coliform bacteria effluent limit while a Beneficial Uses Survey/Dilution Study is conducted to determine existing and potential beneficial uses that may be affected by the discharge and the dilution achieved where those existing and potential beneficial uses may occur. The data generated during the extended study period may be used to calculate a revised water-quality based effluent limit for total coliform bacteria if the results show that a revised limit would be protective of beneficial uses and Ocean Plan water quality objectives
6. **Compliance Schedules**

The Ocean Plan allows for the establishment of time schedules for compliance with its requirements, but because the Basin Plan's provisions for the establishment of compliance schedules are more prescriptive, those provisions are applied in this Order. The Basin Plan authorizes compliance schedules in a permit if an existing discharger cannot immediately comply with a new and more stringent effluent limitation. The Basin Plan requires the discharger to demonstrate the infeasibility of achieving immediate compliance with the new limitation to qualify for a compliance schedule. The Basin Plan requires the following

documentation to be submitted to the Regional Water Board to support a finding of infeasibility:

- a. Descriptions of diligent efforts the Discharger has made to quantify pollutant levels in the discharge, sources of the pollutant in the waste stream, and the results of those efforts.
- b. Descriptions of source control and/or pollutant minimization efforts currently under way or completed.
- c. A proposed schedule for additional or future source control measures, pollutant minimization, or waste treatment.
- d. A demonstration that the proposed schedule is as short as practicable.

The Basin Plan provides for a 10-year compliance schedule to implement measures to comply with new standards as of the effective date of those standards. This provision applies to the objectives adopted in the 2004 Basin Plan Amendment. Additionally, the provision authorizes compliance schedules for new interpretations of other existing standards if the new interpretation results in more stringent limitations.

On July 10, 2006, the Discharger submitted a Justification for a Compliance Schedule asserting that it is infeasible for them to immediately comply with the WQBEL calculated for heptachlor. Heptachlor is a legacy pollutant, banned for most uses in 1978, and banned for all uses except for the control of red imported fire ants (RIFA) in buried, pad-mounted electric power transformers, and in underground cable television and telephone boxes, in 1988. RIFA have not been found to date in San Mateo County; the Discharger therefore asserts that there is no readily apparent source of heptachlor towards which traditional source control efforts might be directed. In addition, the Discharger asserts that there are no feasible treatment technologies effective for heptachlor that can be reasonably implemented by the Discharger. The Regional Water Board independently analyzed the effluent data and considered the Discharger's past efforts and concurred that it is infeasible for the Discharger to achieve immediate compliance for this pollutant. The interim requirements for heptachlor will remain in effect until October 12, 2011, or until additional information is developed for heptachlor.

This Order establishes a compliance schedule that extends beyond one year for heptachlor. This Order does not establish a numerical interim limit for heptachlor because existing heptachlor data are insufficient to calculate a numeric interim limit. Heptachlor was detected in only two of five samples, precluding calculation of an interim limit based on statistical performance. The detected MEC was not selected as an interim limit because this value is below the level of quantification.

This Order addresses the detection of heptachlor by requiring special monitoring, as described below. Effluent monitoring for heptachlor will be increased. Further detections of heptachlor in the effluent will trigger monitoring of heptachlor in the influent and sludge; development and execution of a source identification study; and implementation of source control efforts developed based on influent, effluent and sludge monitoring data, and the results of the source identification study. If heptachlor is not detected prior to the expiration of this Order, the reasonable potential analysis for the next permit renewal will result in no reasonable potential and no effluent limit for heptachlor.

e. Heptachlor

- (1) *Heptachlor WQO*. The WQO for heptachlor established by the Ocean Plan is 0.00005 ug/L. This WQO is well below the ML of 0.01 ug/L identified in Appendix II of the Ocean Plan, and below all the reported laboratory MLs for the past five years.
- (2) *RPA Results*. The MEC for heptachlor of 0.033 µg/L exceeds the applicable WQO after dilution, demonstrating reasonable potential.
- (3) *WQBELs*. The WQBEL for heptachlor calculated according to Ocean Plan procedures is a monthly average of 0.0036 µg/L. The Discharger's 70:1 dilution credit was incorporated in the calculation of the WQBEL.
- (4) *Immediate Compliance Infeasible*. The Discharger's Justification for a Compliance Schedule asserts that the Discharger cannot immediately comply with the WQBEL calculated for heptachlor. The data are insufficient for statistical analysis, and both the MEC exceeds the WQBEL. The Regional Water Board therefore concurs with the infeasibility claim.
- (5) *Interim Effluent Limitation*. The data are insufficient to allow the calculation of an interim effluent limitation. In addition, it is not clear that the Discharger could meet an interim effluent limitation set equal to the MEC of 0.033 ug/L. During the period January 2000 to December 2005, the laboratory MLs ranged from 0.0056 ug/L to 0.08 ug/L, a level well above the MEC. Therefore, no interim effluent limit is established by this Order.
- (6) *Antibacksliding/Antidegradation*. Antibacksliding/antidegradation requirements are satisfied as the previous Order did not include an effluent limitation for heptachlor.

VIII. PUBLIC PARTICIPATION

The San Francisco Bay Regional Water Board is considering the issuance of WDRs that will serve as an NPDES permit for North San Mateo County Sanitation District WWTP. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the Regional Water Board web site and publication in the **San Mateo Times, August 21, 2006**.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on **September 18, 2006**.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: October 11, 2006
Time: 9:00 AM
Location: Elihu Harris State Office Building
1515 Clay Street, 1st Floor Auditorium
Oakland, CA
Contact: John Madigan, (510) 622-2405, jmadigan@waterboards.ca.gov

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is www.waterboards.ca.gov/sanfranciscobay where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

ATTACHMENT G – REGIONAL WATER BOARD ATTACHMENTS

The following documents are part of this Order but are not physically attached due to volume. They are available on the Internet at: <http://www.waterboards.ca.gov/sanfranciscobay/Download.htm>.

- Self-Monitoring Program, Part A (August 1993)
- Standard Provisions and Reporting Requirements, August 1993
- Regional Water Board Resolution No. 74-10
- August 6, 2001 Regional Water Board staff letter, “Requirement for Monitoring of Pollutants in Effluent and Receiving Water to Implement New Statewide Regulations and Policy”